IN THE CLAIMS

Claims 1-2 (Canceled)

3. (Original) A method of manufacturing high purity cobalt comprising the steps of;

converting divalent copper ions as impurities contained in an aqueous solution of cobalt chloride to monovalent copper ions;

adjusting a concentration of hydrochloric acid in a range of 0.1 $kmol/m^3$ to 3 $kmol/m^3$; and

separating the monovalent copper ions from the aqueous solution of cobalt chloride by using anion exchange resins.

4. (Original) A method of manufacturing high purity cobalt according to claim 3, comprising the steps of;

converting divalent copper ions as impurities contained in the aqueous solution of cobalt chloride to monovalent copper ions;

adjusting a concentration of hydrochloric acid in the aqueous solution of cobalt chloride in a range of 0.1 $kmol/m^3$ to 3 $kmol/m^3$; and

separating the monovalent copper ions from the aqueous solution of cobalt chloride by using the anion exchange resins after the steps of converting the divalent copper ions to the monovalent copper ions and adjusting the concentration of hydrochloric acid.

5. (Original) A method of manufacturing high purity cobalt according to claim 3, wherein the converting step comprises the steps of;

injecting an inert gas into the aqueous solution of cobalt chloride; and

contacting the aqueous solution of cobalt chloride with cobalt.

6. (Original) A method of manufacturing high purity cobalt according to claim 3, wherein impurities of at least one selected from the group consisting of zinc, technetium, ruthenium, palladium, silver, cadmium, indium, tin, rhenium, osmium, iridium, platinum, gold, mercury, thallium, lead, bismuth, and polonium are separated from the aqueous solution of cobalt chloride in the step of separating the impurity copper.

7. (Original) A method of manufacturing high purity cobalt according to claim 3, further comprising the steps of;

obtaining cobalt chloride or hydrates thereof from the aqueous solution of cobalt

chloride which the impurity copper are separated therefrom; and

heating the cobalt chloride or the hydrates thereof from 623 K to less than 873 K in a hydrogen atmosphere to obtain cobalt.

8. (Original) A method of manufacturing high purity cobalt according to claim 7, further comprising the step of melting the cobalt obtained in the heating step with plasma arc using a plasma generation gas containing active hydrogen in order to remove impurities of at least one selected from the group consisting of oxygen, nitrogen, carbon, sulfur, halogen, alkaline metals, and alkaline-earth metals.

9. (Original) A method of manufacturing high purity cobalt according to claim 3, further comprising the steps of;

adjusting the concentration of hydrochloric acid in the aqueous solution of cobalt chloride in a range of 7 $kmol/m^3$ to 11 $kmol/m^3$;

contacting the aqueous solution of cobalt chloride with the anion exchange resins to absorb the cobalt thereon and separate at least one of impurities selected from the group consisting of titanium, chromium, manganese, nickel, aluminum, alkaline metals, and alkaline-earth metals contained in the aqueous solution of cobalt chloride with the cobalt; and

eluting the cobalt from the anion exchange resins.

10. (Original) A method of manufacturing high purity cobalt according to claim 9, wherein a hydrochloric acid solution having a concentration of 2.5 $kmol/m^3$ to 5 $kmol/m^3$ is used for eluting the cobalt from the anion exchange resins in order to separate the cobalt from at least one of impurities selected from the group consisting of iron, zinc, molybdenum, technetium, ruthenium, palladium, silver, cadmium, indium, tin, tungsten, rhenium, osmium, iridium, platinum, gold, mercury, thallium, lead, bismuth, and polonium.

11. (Original) A method of manufacturing high purity cobalt comprising the step of heating cobalt chloride or hydrates thereof to 623K to less than 873K in a hydrogen atmosphere to obtain cobalt.

Claims 12-13 (Canceled)